

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 548 427 026 US, in an envelope addressed to: MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: August 4, 2004

Signature: 

(Rebecca McElroy)

FORM PTO 1390  
(REV 10-2003)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

**246152015600**

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

**10/018,009**

INTERNATIONAL APPLICATION NO.  
PCT/EP00/06227

INTERNATIONAL FILING DATE  
14 June 2000

PRIORITY DATE CLAIMED  
14 June 1999

TITLE OF INVENTION **GENES ENCODING ENZYMES IN THE BIOSYNTHESIS OF PIMARICIN AND THE APPLICATION THEREOF**

APPLICANT(S) FOR DO/EO/US **Jesus F. APARICIO et al.**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371 (f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☐ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A preliminary amendment.
14. ☐ An Application Data Sheet under 37 CFR 1.76.
15. ☐ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☒ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information: Response to Notification of Defective Response (3 pages)  
Paper copy of sequence listing (80 pages)  
Return Receipt Postcard

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <div style="text-align: center;">10/018,009</div>	INTERNATIONAL APPLICATION NO. <div style="text-align: center;">PCT/EP00/06227</div>	ATTORNEY'S DOCKET NUMBER <div style="text-align: center;">246152015600</div>
--	--	---

21. ☒ The following fees are submitted:

**BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) – (5)):**

☐ Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO ..... \$1080.00

☐ International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO ..... \$920.00

☐ International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... \$770.00

☐ International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) ..... \$730.00

☐ International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) ..... \$100.00

**ENTER APPROPRIATE BASIC FEE AMOUNT =**

Surcharge of **\$130.00** for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE
Total claims	-20 =		x
Independent claims	-3 =		x
MULTIPLE DEPENDENT CLAIM(s) (if applicable)			+
<b>TOTAL OF ABOVE CALCULATIONS =</b>			\$ 0.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.			\$
<b>SUBTOTAL =</b>			\$ 0.00
Processing fee of <b>\$130.00</b> for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).			\$
<b>TOTAL NATIONAL FEE =</b>			\$ 0.00
Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property			+ \$
<b>TOTAL FEES ENCLOSED =</b>			\$ 0.00
			Amount to be refunded: \$
			charged: \$

**CALCULATIONS PTO USE ONLY**

a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. 03-1952 in the amount of \$ 0.00 to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 03-1952. A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Kate H. Murashige  
 MORRISON & FOERSTER LLP  
 3811 Valley Centre Drive, Suite 500  
 San Diego, California 92130  
 (858) 720-5112

CUSTOMER NUMBER: 25225

SIGNATURE: \_\_\_\_\_  
 Kate H. Murashige

NAME \_\_\_\_\_

29,959

REGISTRATION NUMBER \_\_\_\_\_

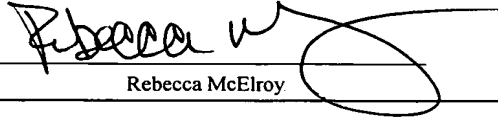
PATENT  
Docket No. 246152019400

**CERTIFICATE OF MAILING BY "EXPRESS MAIL"**

Express Mail Label No.: EV 548427026 US

Date of Deposit: August 4, 2004

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Rebecca McElroy**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In the application of:

Jesus F. APARICIO et al.

Serial No.: 10/018,009

Filing Date: (Intl.) June 14, 2000

International Application No.: PCT/EP00/06227

For: GENES ENCODING ENZYMES IN THE  
BIOSYNTHESIS OF PIMARICIN AND  
THE APPLICATION THEREOF

Examiner: Not Yet Assigned

Group Art Unit: Not Yet Assigned

**RESPONSE TO NOTIFICATION OF DEFECTIVE RESPONSE**

MAIL STOP PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This is in response to a Notification Of Defective Response mailed July 12, 2004, for which a response is due on August 12, 2004. Accordingly, this response is timely filed.

Please enter the following substitute sequence listing and remarks.

**In the Sequence Listing:**

Please insert a substitute paper copy of the Sequence Listing as new pages 1-80. A substitute computer readable form copy of the Sequence Listing (CRF COPY) accompanies this response.

## REMARKS

The sequence listing has been amended to correct the errors identified in the raw sequence listing error report mailed July 12, 2004. The undersigned hereby states that the substitute computer readable form copy (CRF copy) of the Sequence Listing and the substitute paper copy of the Sequence Listing, submitted in accordance with 37 C.F.R. § 1.825(a) and (b), respectively, are the same and contain no new matter. Accordingly, entry of the substitute Sequence Listing into the above-captioned case is respectfully requested.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 246152015600. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

Dated: August 4, 2004

By:

Kate H. Murashige  
Kate H. Murashige  
Registration No. 29,959

Morrison & Foerster LLP  
3811 Valley Centre Drive  
Suite 500  
San Diego, California 92130-2332  
Telephone: (858) 720-5112  
Facsimile: (858) 720-5125